Federal Reserve Banks

Two major interests of the Federal Reserve Banks during 1997 were the Federal Reserve's role in the payments mechanism and continued preparation for the century date change. Other important activities were preparation of revised accounting procedures related to interstate branching and implementation of new procedures for the provision of fiscal agency and depository services for the federal government.

Major Initiatives

Payment Services

The System's Committee on the Federal Reserve in the Payments Mechanism during 1997 reviewed the payment services provided by the Federal Reserve to depository institutions and began preparing its report. Created by Chairman Greenspan in October 1996 in recognition of the rapid changes in the financial services and technology sectors, the committee had as one of its goals determining the extent to which the Federal Reserve should be involved in providing check collection and automated clearinghouse (ACH) services and future generations of payment services. Board of Governors Vice Chair Alice M. Rivlin chaired the committee; members were Governor Edward W. Kelley, Jr., William J. McDonough, president of the Federal Reserve Bank of New York, and Thomas C. Melzer, president of the Federal Reserve Bank of St. Louis.

The committee focused its discussions and analyses of critical payment systems issues by developing five hypothetical scenarios for the future role of the Federal Reserve in retail payment services. The scenarios ranged from exiting the check and ACH services altogether to playing a more active role, in collaboration with other providers, in moving more rapidly toward electronic payment services. The scenarios were not designed to be actual policy options, but were intended to serve as catalysts for debate both within the Federal Reserve and among payment system participants. The committee held forums around the country so that representatives of depository institutions, clearinghouses, other payment service providers, consumers, businesses, and academics could express their views on the various possible future directions. Federal Reserve staff analyzed the likely impact of each of the alternatives on payment systems of the future, with emphasis on efficiency, access by depository institutions of various sizes, and whether different roles of the Federal Reserve would accelerate or retard the movement to electronic forms of payment.

The committee came to two general conclusions: (1) The Federal Reserve should remain a provider of both check collection and ACH services, with the explicit goal of enhancing the efficiency, effectiveness, and convenience of both systems while ensuring access by all depository institutions; and (2) The Federal Reserve should play a more active role, working closely and collaboratively with providers and users of payment systems, both to enhance the efficiency of check and ACH services and to help evolve strategies for moving to the next generation of payment instruments. In reaching these conclusions, the committee recognized that fostering private-sector competition is vital in improving the efficiency of payment systems and in developing new payment instruments.

Year 2000 Readiness

The Federal Reserve continued in 1997 to focus on its readiness for the century date change to ensure that the Reserve Banks continue to provide reliable services to the nation's banking system and financial markets. When it began consolidating its mainframe data processing operations late in 1992, the Federal Reserve started to address the possibility that automated systems would not function properly at the turn of the century. As a result, new centralized applications critical to the Federal Reserve's mission, such as Fedwire funds transfer, Fedwire securities transfer, and ACH, were designed to operate properly into the next century. All changes to Reserve Bank computer programs, testing of systems, and acceptance testing by Federal Reserve users of those systems are scheduled to be completed by year-end 1998. In addition, critical financial-services systems that interface with depository institutions will be year 2000 ready by mid-1998; this schedule will permit approximately eighteen months for customer testing.

Also during the year, the Reserve Banks initiated a comprehensive program to raise public awareness of the potential year 2000 problem and to advise depository institutions of the Federal Reserve's plans and schedules. The Reserve Banks also participated in domestic and international forums to help foster awareness of year 2000 issues and to share experiences, ideas, and best practices.

Interstate Branching

As a result of the Riegle–Neal Interstate Banking and Branching Act of 1994, which became effective in June 1997, banking organizations that formerly maintained separately chartered institutions in different states may now convert those institutions into branches of a single chartered bank. With fewer chartered institutions, at the end of 1997, Reserve Banks held 9,368 accounts, compared with 9,753 at year-end 1996, a decrease of 4.0 percent.

To accommodate banking organizations having an interstate structure, the Reserve Banks established an account structure, effective January 2, 1998, that provides, for each chartered institution, a single (master) account at one Reserve Bank, in which all credits and debits arising from financial transactions with the Federal Reserve are settled. Institutions may maintain subaccounts to keep separate several different types of financial transaction information—for example, by geographic region or operational function. The Reserve Banks modified their accounting software to permit institutions to view intraday activity in the master account and any subaccounts separately or combined. This new structure and associated accounting tools permit interstate banking organizations to centralize all their financial information or to segregate information according to their needs.

The Board of Governors in 1997 amended some Federal Reserve regulations to facilitate the transition to the single Federal Reserve account structure. Specifically, the Board amended Regulation J to allow an institution to send checks for collection to any Reserve Bank and to settle for checks through its single account. It also revised Regulations D and I to define an institution's location for purposes of Federal Reserve membership and account location. It further amended Regulation D to allow pass-through correspondents to hold all their respondent balances in their single Federal Reserve account, regardless of the location of the respondent; this change allows U.S. branches and agencies of foreign banks, and also Edge Act and agreement corporations, to adopt a single account structure by combining the reserve balances of multiple offices into a single pass-through correspondent account.

Fees for Electronic Payment Services

In March 1997, the Board adopted guidelines for the Reserve Banks in establishing fees for their electronic payment services on the basis of volume. The Board also approved the continuation of volume-based fees for certain electronic check products, pending completion of an analysis of whether those fees meet the new guidelines. In May, the Reserve Banks implemented volume-based fees for the ACH service.

Fiscal Agency and Depository Services

Reserve Banks worked during the year to implement a policy, adopted in late 1996, to clarify the Reserve Banks' unique statutory relationship with the Treasury and other federal government entities. The Reserve Banks provide fiscal agency and depository services for the U.S. government; the policy, among other things, establishes uniform and consistent practices for accounting, reporting, and billing for the full costs of providing these services.

Developments in Federal Reserve Priced Services

The Monetary Control Act of 1980 requires that the Federal Reserve set fees for providing "priced services" to depository institutions that, over the long run, recover all the direct and indirect costs of providing the services as well as the imputed costs, such as the income taxes that would have been paid and the pretax return on equity that would have been earned had the services been provided by a private firm. The imputed costs are collectively referred to as the private sector adjustment factor (PSAF).[1] Over the past ten years, the Federal Reserve System has recovered 100.4 percent of its priced services costs, including the PSAF.

Overall, fees charged in 1997 for priced services were lowered approximately 3.7 percent from 1996 levels.[2] The fees for electronic payment services were lowered significantly, in large part because of the efficiencies associated with the transition to a consolidated automation environment and with the centralization of electronic payment processing applications.

Revenue from priced services in 1997 was $789.1 million, other income related to priced services was $29.7 million, and costs related to priced services were $721.5 million. As a result, net

1. The imputed costs that make up the PSAF, in addition to income taxes and the pretax return on equity, are interest on debt, sales taxes, and assessments for deposit insurance from the Federal Deposit Insurance Corporation. Also allocated to priced services are assets and personnel costs of the Board of Governors that are related to priced services; in the *pro forma* statements at the end of this chapter, Board expenses are included in operating expenses and Board assets are part of long-term assets.

2. Based on a chained Fisher Ideal price index not adjusted for quality changes.

revenue was $97.3 million, for a recovery rate of 101.5 percent of costs, including the PSAF. Revenue from priced services in 1996 was $26.6 million more than total costs, resulting in a recovery rate of 103.4 percent, including the PSAF.[3]

Check Collection

In 1997, total Reserve Bank operating expenses and imputed costs for commercial check services were $581.2 million, compared with $570.7 million in 1996. Revenue from check operations totaled $598.4 million, and other income amounted to $23.2 million, resulting in income before income taxes of $40.4 million. The Reserve Banks handled 15.9 billion checks, an increase of 3.0 percent over 1996 (see table). The volume of fine-sort check deposits, which are presorted by the depositing bank according to paying bank, increased 0.7 percent in 1997, compared with an 11.9 percent decline in 1996. The volume of checks deposited that required processing by Reserve Banks rose 3.4 percent.

To increase the efficiency of the check-collection system, the Reserve Banks continued to expand the use of electronics in check processing. During 1997, the Reserve Banks electronically presented approximately 2.2 billion checks, or 14.1 percent of all checks presented to paying banks, an increase of about 56 percent over the 1996 level. Both the number of checks presented electronically and the number of checks truncated grew in 1997.

The Reserve Banks also continued in 1997 to offer more products involving the capture and storage of digital images to support paying banks' use of electronic check products. With the New York and Richmond Districts' introduction of image products during the year, at least one office in each Federal Reserve District except the First offered image products in 1997; the Boston Reserve Bank plans to offer image products in early 1998.

3. Expense data reported throughout this document—revenue, other income, cost, net revenue, and income before taxes—can be linked to the *pro forma* statements at the end of this chapter. *Other income* is revenue from investment of clearing balances, net of earnings credits, an amount termed net income on clearing balances. *Total cost* is the sum of operating expenses, imputed costs (interest on debt, interest on float, sales taxes, and the Federal Deposit Insurance Corporation assessment), imputed income taxes, and the targeted return on equity. *Net revenue* is revenue plus net income on clearing balances minus total cost.

Activity in Federal Reserve Priced Services, 1997, 1996, and 1995

Thousands of items

Service	1997	1996	1995	Percentage change	
				1996–97	1995–96
Commercial checks	15,949,152	15,486,833	15,465,209	3.0	.1
Funds transfers	91,800	84,871	77,742	8.2	9.2
Securities transfers	4,136	4,125	3,689	.3	11.8
Commercial ACH	2,602,892	2,372,108	2,046,086	9.7	15.9
Noncash collection	887	1,069	838	–17.1	27.6
Cash transportation	2	36	61	–93.9	–41.0

NOTE. Components may not yield percentages shown because of rounding. Activity in *commercial checks* is the total number of commercial checks collected, including processed and fine-sort items; in *funds transfers* and securities transfers, the number of transactions originated *on line and off line; in ACH,* the total number of commercial items processed; in *noncash collection,* the number of items on which fees are assessed; in *cash transportation,* the number of registered mail shipments and FRB-arranged armored carrier stops.

In October 1997, the Boston Reserve Bank closed its Regional Check Processing Center at Lewiston, Maine, and consolidated its check-processing operations at the Boston office. In addition, the Interdistrict Transportation System moved one of its five airport hubs from Cleveland to Cincinnati, Ohio, enabling Reserve Banks to set later deposit deadlines and to improve funds availability for many depositors.

Fedwire Funds Transfer and Net Settlement

Reserve Bank operating expenses and imputed costs for Fedwire funds transfer and net settlement services totaled $79.9 million in 1997, compared with $71.1 million in 1996. Revenue from these operations totaled $94.6 million, and other income amounted to $3.2 million, resulting in income before income taxes of nearly $18.0 million.

Funds Transfer

The number of Fedwire funds transfers originated by depository institutions increased 8.2 percent in 1997, to 91.8 million, of which 89.5 million were value (monetary) transfers and 2.4 million were nonvalue messages. The increase in volume was due largely to increased mutual fund activity and aggressive marketing of cash management services by depository institutions, and to a lesser extent to increased mortgage activity and securities-related settlement payments.

Fees charged for Fedwire transfers were lowered 10 percent in 1997, from $0.50 to $0.45 per basic transfer. As a result, depository institutions paid approximately $9.2 million less for funds transfers in 1997 than in 1996. The reduction generally reflects increased efficiencies resulting from the centralization of Fedwire funds transfer processing.

By year-end 1997, all on-line institutions (those with an electronic connection to the Federal Reserve) had adopted a new, expanded-message Fedwire funds transfer format. The new format (1) reduces manual intervention in the transfer process, (2) eliminates the need to truncate payment-related information when forwarding payment orders that were received via other large-value transfer systems through Fedwire, and (3) allows additional information about the originator and beneficiary of a transfer to be included in the transfer message, as required by the Bank Secrecy Act rules adopted by the Department of the Treasury.

On December 8, the Fedwire funds transfer service began opening at 12:30 a.m. eastern time, thereby expanding the Fedwire funds transfer service day to eighteen hours from the previous ten hours. The longer day is useful to the private sector in reducing settlement risk in foreign exchange markets; it also eliminates an operational barrier to potentially important innovations in privately provided payment and settlement services.

Net Settlement

The Federal Reserve provides net settlement services to approximately 170 local private-sector clearing and settlement arrangements and to seven nationwide arrangements.[4] These

4. Two of the national arrangements, the Clearing House Interbank Payments System (CHIPS) and the Participants Trust Company (PTC), process and net large-dollar transactions, CHIPS for interbank funds transfers and PTC for the settlement of mortgage-backed securities transactions. Two of the other national arrangements, VisaNet ACH and the New York ACH, process and net small-dollar ACH transactions. The other three

(Footnote continues on next page.)

arrangements enable participants to settle their net positions either via Fedwire funds transfers using special settlement accounts at Reserve Banks or via accounting entries, which are posted to participants' Reserve Bank accounts.

In 1997, the Federal Reserve Board requested comment on a proposal that would enhance the Reserve Banks' current net settlement services. Under the proposed changes, the Reserve Banks would offer a fully automated net settlement service to participants in clearing arrangements. The service would provide finality of settlement at least once on the settlement date, rather than next-day finality.

Fedwire Book-Entry Securities

Reserve Bank operating expenses and imputed costs for book-entry securities transfer services totaled $15.5 million in 1997, compared with $16.2 million in 1996. Revenue from book-entry securities operations totaled $16.6 million, and other income amounted to $0.6 million, resulting in income before income taxes of $1.7 million. The Reserve Banks processed 4.1 million transfers of government agency securities on the Fedwire book-entry securities transfer system during the year, an increase of 0.3 percent over the 1996 level.[5] Fees charged for book-entry securities transfers did not change from 1996 to 1997.

Seven Reserve Banks converted their Fedwire securities transfer applications to the Federal Reserve's new centralized application known as the National Book-Entry System (NBES), joining the four Reserve Banks that converted to NBES in 1996. The NBES offers several benefits, including (1) an expanded account structure designed to accommodate the different needs of Federal Reserve customers and U.S. government agencies, (2) modular, centralized application software designed to facilitate a more rapid response to changing industry needs, (3) improved, standardized contingency and disaster recovery capabilities, and (4) processing efficiencies such as uniform operating hours in all Districts. The conversion process will be complete when the Federal Reserve Bank of New York converts to NBES in early 1998.

Automated Clearinghouse

Reserve Bank operating expenses and imputed costs for commercial ACH services totaled $52.3 million in 1997, compared with $63.7 million in 1996. Revenue from ACH operations totaled $70.3 million, and other income amounted to $2.4 million, resulting in income before income taxes of $20.4 million. The Reserve Banks processed 2.6 billion commercial ACH transactions during the year, an increase of 9.7 percent over 1996 volume.

The year 1997 was the first full year that all Reserve Banks operated with the new centralized automated system known as Fed ACH. The ongoing reduction in ACH operating costs in 1997

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national arrangements—the National Clearing House Association, the Interdistrict Check Exchange and Settlement Service, and the National Check Exchange—clear and net check transactions. Most local clearing arrangements are check clearinghouses.

5. The revenues, expenses, and volumes reported here are for transfers of securities issued by federal government agencies, government-sponsored enterprises, and international institutions such as the World Bank. The Fedwire book-entry securities service also provides custody, transfer, and settlement services for U.S. Treasury securities. The Reserve Banks act as fiscal agents of the United States when they transfer and safekeep Treasury securities, and the Treasury assesses fees on depository institutions for some of these services. For more details, see the section ''Fiscal Agency Services'' later in this chapter.

reflects the savings realized from centralization. Consolidation of operations also made it possible to offer several new features to depository institutions, including additional file delivery options and automated trace and research capabilities.

In May, the Reserve Banks implemented volume-based fees for ACH transactions. The use of volume-based fees, an extension of the multipart fees already in use, increases the potential to improve the payment system's efficiency by permitting the Reserve Banks to address the differences in demand for services by high-volume customers (2,500 items or more per file) and low-volume customers (fewer than 2,500 items per file) through the fees charged for those services. As a result of volume-based pricing, the cost to depository institutions to originate ACH transactions declined an average of 17 percent and the cost to institutions to receive ACH transactions declined 10 percent. In October, the Reserve Banks extended the regular billing deposit deadline for ACH items, which reduced the number of customers subject to premium fees.

Noncash Collection

Reserve Bank operating expenses and imputed costs for noncash collection services totaled $3.2 million in 1997, compared with $4.9 million in 1996. Revenue from noncash operations totaled $4.3 million, and other income amounted to $0.2 million, resulting in income before income taxes of $1.3 million. The Reserve Banks processed 887,000 noncash collection items (coupons and bonds), a decrease of 17.1 percent from 1996.

Until late in the year, two Federal Reserve sites processed noncash items—the Cleveland Reserve Bank and the Jacksonville Branch of the Atlanta Reserve Bank. In the fourth quarter of 1997, all noncash processing was centralized at the Jacksonville Branch.

Cash Services

Because the provision of high-quality currency and coin is a basic responsibility of the Federal Reserve, the Reserve Banks charge fees only for certain special cash services. These services include providing wrapped coin, nonstandard currency packages, and more-frequent-than-standard access to cash services.

The Cleveland District and the Helena Branch of the Minneapolis Reserve Bank provide wrapped coin as a priced service. In 1997, the Detroit Branch of the Chicago Reserve Bank and the Helena Branch provided currency in nonstandard packages, and the Minneapolis and San Francisco Districts and the Detroit Branch offered access to cash services more frequently than that provided under the Federal Reserve's standard access policy. When the uniform cash access policy is implemented in May 1998, income from fees for nonstandard cash access will be treated as a recovery of expense rather than as priced-service revenue. The new policy will provide flexibility by permitting depository institutions to obtain cash services from any Reserve Bank office.

Depository institutions pay the cost of transporting cash to and from Reserve Banks. In the past, many of the Reserve Banks arranged transportation to move cash to and from depository institutions in their Districts. During the third quarter of 1997, the last Federal Reserve office to provide that service stopped arranging armored carrier cash transportation when the Helena Branch canceled its armored carrier contract for the delivery of cash. Seven Districts still provide cash transportation by registered mail.

Reserve Bank operating expenses and imputed costs for special cash services totaled $4.5 million in 1997, compared with $5.2 million in 1996. Revenue from cash operations totaled $4.9 million, and other income amounted to $0.2 million, resulting in income before income taxes of $0.6 million.

Float

Federal Reserve float decreased in 1997 to a daily average of $282.0 million, from a daily average of $413.4 million in 1996. The Federal Reserve recovers the cost of float associated with priced services as part of the fees for those services.

Developments in Currency and Coin

The Federal Reserve continued in 1997 to work closely with the Treasury to deter the counterfeiting of U.S. currency. The Series 1996 currency design program continued with the introduction of the new $50 note in October. The Series 1996 $100 note, introduced in March 1996, continued to gain acceptance and accounted for more than half of the $100 notes in circulation by the end of 1997. Work on the Series 1996 $20 note continued; distribution is scheduled for fall 1998.

The Federal Reserve's cost to print new currency in 1997 was $356 million. The Treasury's Bureau of Engraving and Printing produced 9.5 billion notes in 1997; 15 percent of the notes produced were of the Series 1996 new design, 45 percent were $1 notes, and the remaining 40 percent were $5, $10, and $20 notes.

The Federal Reserve supplies currency and coin to approximately 9,500 depository institutions throughout the United States; these institutions supply currency and coin to other depository institutions and to the public. The value of currency and coin in circulation increased 6.9 percent in 1997 and exceeded $482 billion by year-end. During the year, the Federal Reserve received more than 25.3 billion Federal Reserve notes in deposits from depository institutions and sent more than 25.8 billion Federal Reserve notes to depository institutions. The Federal Reserve finished converting its currency-processing operations to Giesecke and Devrient's Banknote Processing System (BPS) 3000, an electronic, high-speed currency processing, destruction, and accounting system. At the end of 1997, the 128 BPS 3000 machines installed at Reserve Banks were processing approximately 97 million notes each business day. Reserve Bank operating expenses for processing and storing currency and coin, including priced cash services, totaled $283 million for the year.

In late 1997, the Cleveland Reserve Bank consolidated the Pittsburgh Branch cash operations at its head office in Cleveland, which left the Federal Reserve with 36 cash operations. The Pittsburgh Branch continues to receive currency deposits and to disburse currency shipments prepared at the Cleveland Reserve Bank.

Developments in Fiscal Agency and Government Depository Services

The Federal Reserve Act provides that when required by the Secretary of the Treasury, Reserve Banks will act as fiscal agents and depositories of the United States. As fiscal agents, Reserve Banks provide services for the Department of the Treasury related to the federal debt, such as issuing, transferring or reissuing, exchanging, and redeeming marketable Treasury securities and savings bonds and processing secondary market transfers initiated by depository institutions. As depositories, Reserve Banks collect and disburse funds on behalf of the federal government. The Reserve Banks also provide fiscal agency services on behalf of several domestic and international government agencies.

The total cost of providing fiscal agency and depository services for the Treasury in 1997 amounted to $255.4 million, compared with $265.2 million in 1996 (see table). The cost of providing services to other government agencies was $48.6 million, compared with $49.8 million in 1996.

Significant Reserve Bank resources were devoted in 1997 to the General Accounting Office (GAO) audit of U.S. government consolidated financial statements. As part of the audit, the GAO reviewed principal Federal Reserve operations and automated applications that process Treasury transactions.

During the year, the Reserve Banks and the Treasury jointly conducted studies to identify the best ways to provide services to the Treasury over the next five years. The business areas studied were Treasury Direct, Treasury tax and loan, collateral, savings bonds, and Treasury auctions.

Fiscal Agency Services

The Reserve Banks handle marketable Treasury securities and savings bonds and monitor the collateral pledged by depository institutions to the federal government.

Expenses of the Federal Reserve Banks for Fiscal Agency and Depository Services, 1997, 1996, and 1995

Thousands of dollars

Agency and service	1997	1996	1995
DEPARTMENT OF THE TREASURY			
Bureau of the Public Debt			
Savings bonds	70,340.4	78,765.8	80,934.6
Treasury Direct	35,440.4	26,788.8	30,117.4
Commercial book entry	26,809.4	27,099.0	27,705.9
Marketable Treasury issues	14,855.4	22,349.9	22,830.3
Definitive securities and Treasury coupons	3,618.9	3,498.5	3,860.6
Total	151,064.5	158,502.0	165,448.8
Financial Management Service			
Treasury tax and loan and Treasury general account	35,265.9	38,828.2	35,749.3
Government check processing	26,548.0	22,604.1	24,347.4
Automated clearinghouse	14,477.3	20,557.0	22,238.0
Government agency deposits	2,795.3	3,366.1	3,823.5
Fedwire funds transfers	422.0	455.3	357.9
Other services	20,994.2	17,346.3	16,376.7
Total	100,502.7	103,157.1	102,892.8
Other			
Total	3,840.0	3,554.6	4,017.5
Total, Treasury	255,407.2	265,213.6	272,359.1
OTHER FEDERAL AGENCIES			
Securities services	17,042.1	18,788.8	18,547.2
Food coupons	25,495.7	25,287.6	24,251.4
Postal money orders	6,108.7	5,722.9	5,467.8
Total, other agencies	48,646.5	49,799.3	48,266.4
Total	**304,053.7**	**315,012.9**	**320,625.5**

Marketable Treasury Securities

Reserve Bank operating expenses for activities related to marketable Treasury securities (Treasury Direct, commercial book entry, Treasury issues, and definitive securities and coupons) totaled $80.7 million in 1997, a 1.2 percent increase over 1996. The New York, Chicago, and San Francisco Reserve Banks processed more than 411,000 commercial tenders for government securities in Treasury auctions, 7.6 percent fewer than in 1996.

The Reserve Banks operate two book-entry securities systems for the custody and transfer of Treasury securities—the Fedwire system and Treasury Direct. Almost all book-entry Treasury securities, 97.6 percent of the total par value outstanding at year-end 1997, were maintained on Fedwire; the remainder were maintained on Treasury Direct.

The Reserve Banks in 1997 processed 8.8 million Fedwire transfers of Treasury securities, a 1.9 percent decline from 1996. They also processed 23.9 million interest and principal payments for Treasury and government agency securities, a 10.8 percent increase over 1996.

Treasury Direct, operated by the Philadelphia Reserve Bank, is a system of book-entry securities accounts for institutions and individuals planning to hold their Treasury securities to maturity. The Treasury Direct system holds more than 1.9 million accounts. During 1997, the Reserve Banks processed nearly 433,000 tenders for Treasury Direct customers seeking to purchase Treasury securities at Treasury auctions and handled 1.7 million reinvestment requests; the volume of tenders was 3.9 percent lower than in 1996, and the volume of reinvestment requests was 13.2 percent lower. The Philadelphia Reserve Bank issued 6.9 million payments for discounts, interest, and redemption proceeds; 2.8 million payments for savings bonds; and more than 51,000 interest payments for definitive Treasury issues.

In 1997, the Federal Reserve worked with the Treasury's Bureau of the Public Debt to make several changes that benefit Treasury Direct investors. First, the Treasury Direct account statement was redesigned for clarity. Second, the "Buy Direct" program was introduced; it permits certain Treasury Direct investors to pay for Treasury securities by means of an ACH debit to their bank account on the security's issue date rather than by a personal or certified check submitted in advance. Third, the "Reinvest Direct" program was begun; it permits investors to schedule their reinvestments electronically using a touch-tone telephone. Finally, the Chicago Reserve Bank introduced the "Sell Direct" program; for a fee, the Bank will liquidate Treasury securities on the secondary market for Treasury Direct investors; in the last four months of the year, the Bank sold more than 4,000 securities worth $132.3 million at the request of Treasury Direct investors.

Savings Bonds

Reserve Bank operating expenses for savings bond activities totaled $70.3 million in 1997, a decrease of 10.8 percent from 1996. The Reserve Banks printed and mailed 51.4 million savings bonds on behalf of the Treasury's Bureau of the Public Debt, a 6.8 percent decline from 1996. They processed 39 million original-issue transactions. They also processed approximately 674,000 redemption, reissue, and exchange transactions, a 1.5 percent increase over 1996. In addition, the Reserve Banks responded to 1.7 million service calls from owners of savings bonds, approximately the same number as in 1996.

Savings bond operations are conducted at five Reserve Bank offices: Buffalo, Pittsburgh, Richmond, Minneapolis, and Kansas City. All five offices process savings bond transactions, but only the Pittsburgh and Kansas City offices print and mail savings bonds.

Other Initiatives

The St. Louis Reserve Bank in 1997 completed development and installation of Cash Track for the Treasury's Financial Management Service. By consolidating information about receipts and payments processed on behalf of the Treasury, Cash Track makes it easier for the Treasury to forecast its cash needs. The average daily flow reported by Cash Track is $13.4 billion. At year-end, the Treasury was running parallel systems and expected to implement Cash Track fully in 1998.

The Federal Reserve also worked with the Financial Management Service to implement the Treasury Offset Program, which electronically compares information about delinquent debts owed the U.S. government with information about payments being issued by the government. If a match occurs, the Treasury applies a portion of the payment to the delinquent debt. The Federal Reserve Bank of San Francisco developed the software with which the Treasury maintained an interim delinquent debtor database for matching against payments and provided support to the Treasury in its efforts to develop software for longer-term use.

Depository Services

The Reserve Banks maintain the Treasury's funds account, accept deposits of federal taxes, pay checks drawn on the Treasury's account, and make electronic payments on behalf of the Treasury.

Federal Tax Payments

Reserve Bank operating expenses related to federal tax payment activities in 1997 totaled $35.3 million. The Reserve Banks processed approximately 334,000 paper and 5.7 million electronic advices of credit from depository institutions handling tax payments for businesses and individuals. (Advices of credit are notices from depository institutions to the Federal Reserve and the Treasury summarizing taxes collected on a given day.) The number of paper advices of credit declined 61.7 percent from 1996 to 1997, and the number of tax payments submitted electronically increased 5.8 percent. The Reserve Banks also received a small number of tax payments directly. Depository institutions that receive tax payments may place the funds in a Treasury tax and loan (TT&L) account or remit the funds to a Reserve Bank. The Minneapolis Reserve Bank operates an automated system through which businesses pay taxes that are due on the same day the tax liability is determined. These electronic tax payments, a part of the Treasury's Electronic Federal Tax Payment System, are invested in depository institutions' TT&L balances via the Federal Reserve's TT&L mechanism. In 1997, this electronic tax application processed approximately 56,000 tax payments from 5.3 million taxpayers totaling $70.8 billion.

Payments Processed for the Treasury

Reserve Bank operating expenses related to government payment operations (check processing, ACH, agency deposits, and funds transfers) totaled $44.2 million in 1997. The Treasury continued to encourage electronic payments. For example, ACH transactions processed for the Treasury (social security, pension, salary, and vendor payments) totaled 677 million, an increase of 8.4 percent over 1996. All recurring Treasury Direct payments and most definitive securities interest payments are made via the ACH.

The Treasury also continues to reduce the number of payments made by check. The Reserve Banks processed 378 million paper government checks in 1997, a decrease of 13.3 percent from 1996. They also issued 1.6 million fiscal agency checks, a decrease of 19.1 percent from 1996. Fiscal agency checks were used primarily to pay semiannual interest on registered, definitive Treasury notes and bonds and Series H and HH savings bonds; they were also used to pay the principal of matured securities and coupons and to make discount payments to first-time purchasers of government securities through Treasury Direct.

In 1997, the Reserve Banks began to capture and store digital images of U.S. government checks for the Treasury's Financial Management Service; full implementation of the system is expected in 1998. Digital imaging will improve the Treasury's check reconciliation and claims processing by eliminating manual research and by reducing the time needed to make information on paid Treasury checks available for research and inquiry.

Services Provided to Other Entities

When required to do so by the Secretary of the Treasury or when required or permitted to do so by federal statute, the Reserve Banks provide fiscal agency and depository services to other domestic and international agencies. Depending on the authority under which the services are provided, the Reserve Banks may (1) maintain book-entry accounts of government agency securities and handle their transfer, (2) provide custody for the stock of unissued, definitive securities, (3) maintain and update balances of outstanding book-entry and definitive securities for issuers, (4) perform various other securities-servicing activities, and (5) maintain funds accounts for some government agencies.

One such service is the provision of food coupon services for the U.S. Department of Agriculture. Reserve Bank operating expenses for food coupon services in 1997 totaled \$25.5 million, 0.8 percent higher than in 1996. The Reserve Banks redeemed 2.9 billion food coupons, a decrease of 21.5 percent from 1996. The volume of paper food coupons redeemed by the Reserve Banks is expected to continue to decline each year as a result of the Department of Agriculture's program to provide benefits electronically.

Information Technology

In 1997, Federal Reserve Automation Services (FRAS) continued to consolidate the Federal Reserve System's data processing and data communications systems, managed the three consolidated data centers, and continued to explore new technologies for improved communications strategies.[6] By the end of 1997, most Reserve Bank applications except check processing had been converted to the shared processing environment; mainframe computers dedicated to check processing remained in ten Districts.

At year-end, the Federal Reserve supported approximately 12,450 Fedline connections (electronic links between

6. The consolidated data centers are located at East Rutherford, New Jersey; Richmond, Virginia; and Dallas, Texas.

small depository institutions and Reserve Banks) and 580 computer interface connections, enabling depository institutions to access Federal Reserve services and to report information; depository institutions that transmit large numbers of transactions to Reserve Banks use more sophisticated computer interface connections over dedicated leased circuits. In 1997, FRAS continued its ongoing efforts to explore alternative, more efficient electronic services, such as web-based technology.

During 1997, the Reserve Banks completed FEDNET, the new Federal Reserve telecommunications network. FEDNET offers a consistent level of service to all points in the System, as well as improved reliability, security, and disaster recovery capabilities.

Financial Examinations of Federal Reserve Banks

Section 21 of the Federal Reserve Act requires that the Board of Governors order an examination of each Reserve Bank at least once a year. The Board has assigned this responsibility to its Division of Reserve Bank Operations and Payment Systems. Every year since 1995, the division has engaged a public accounting firm to audit the combined financial statement of the Reserve Banks. In addition, in 1997 the public accounting firm audited the individual year-end financial statement of each of the twelve Reserve Banks; the firm relied, in part, on the division's 1997 reviews of the major operating areas of the twelve Reserve Banks for these audits.

In addition, the division rendered an opinion on the management control system at each Reserve Bank, using a format consistent with the integrated framework of the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Following COSO's four control objectives, the examinations concentrated on (1) efficiency and effectiveness of operations, (2) accuracy of financial data, (3) compliance with applicable laws and regulations, and (4) safeguarding of assets. The Reserve Banks have also adopted the COSO framework as it applies to the accuracy of financial reporting, for implementation in 1998. To prepare for implementation, three Reserve Banks in 1997 conducted pilot self-assessments of their internal control systems for financial reporting.

As in past years, the division in 1997 assessed compliance with policies established by the Federal Open Market Committee (FOMC) by examining the accounts and holdings of the System Open Market Account at the Federal Reserve Bank of New York and the foreign currency operations conducted by that Reserve Bank. In addition, at year-end a public accounting firm certified the schedule of participated asset and liability accounts and the related schedule of participated income accounts.

Income and Expenses

The accompanying table summarizes the income, expenses, and distributions of net earnings of the Federal Reserve Banks for 1997 and 1996.

Income in 1997 was $26,917 million, compared with $25,164 million in 1996. Total expenses were $2,151 million ($1,618 million in operating expenses, $359 million in earnings credits granted to depository institutions, and $174 million in assessments for expenditures by the Board of Governors). The cost of new currency (including printing, shipping, and other expenses) was $364 million. Revenue from priced services was $789 million. Unreimbursed expenses for services provided to the Treasury and other government entities amounted to $35 million.[7]

The profit and loss account showed a net loss of $2,577 million. The loss was due primarily to realized and unrealized losses on assets denominated in foreign currencies that were revalued to reflect current market exchange rates. Statutory dividends paid to member banks totaled $300 million, $44 million more than in 1996; the rise reflects an increase in the capital and surplus of member banks and a consequent increase in the paid-in capital stock of the Reserve Banks.

Payments to the Treasury in the form of interest on Federal Reserve notes totaled $20,659 million in 1997, up from $20,083 million in 1996; the payments equal net income after the deduction of dividends paid and of the amount necessary to bring the surplus of the Reserve Banks to the level of capital paid-in. In addition, the Federal Reserve in 1997 made a lump-sum payment of $107 million to the U.S. Treasury from the surplus account of the Reserve Banks, as required by statute, compared with $106 million in 1996.

In the "Statistical Tables" chapter of this Report, table 6 details the income and expenses of each Federal Reserve Bank for 1997, and table 7 shows a condensed statement for each Bank for 1914–97. A detailed account of the assessments and expenditures of the Board of Governors appears in the following chapter, "Board of Governors Financial Statements."

7. The Reserve Banks bill the Treasury and other government entities for the cost of certain services, and the portions of the bills that are not paid are reported as unreimbursed expenses.

Holdings of Securities and Loans

The Reserve Banks' average daily holdings of securities and loans during 1997 amounted to $417,805 million, an increase of $27,537 million over 1996 (see table). Holdings of U.S. government securities increased $27,466 mil-

Income, Expenses, and Distribution of Net Earnings of Federal Reserve Banks, 1997 and 1996

Millions of dollars

Item	1997	1996
Current income	26,917	25,164
Current expenses	1,976	1,948
Operating expenses[1]	1,618	1,639
Earnings credits granted	359	309
Current net income	24,941	23,216
Net additions to (deductions from, –) current net income	–2,577	–1,639
Cost of unreimbursed services to Treasury	35	38
Assessments by the Board of Governors	539	565
For expenditures of Board	174	163
For cost of currency	364	403
Net income before payments to Treasury	21,790	20,975
Dividends paid	300	256
Transferred to surplus	832	635
Payments to Treasury[2]	20,659	20,083

Note. In this and the following table, components may not sum to totals because of rounding.

1. Includes a net periodic credit for pension costs of $200.0 million in 1997 and $139.5 million in 1996.

2. Interest on Federal Reserve notes.

Securities and Loans of Federal Reserve Banks, 1995–97

Millions of dollars except as noted

Item and year	Total	U.S. government securities[1]	Loans[2]
Average daily holdings[3]			
1995	376,069	375,867	202
1996	390,268	390,063	206
1997	417,805	417,529	277
Earnings			
1995	23,837	23,826	11
1996	23,895	23,884	11
1997	25,714	25,699	15
Average interest rate (percent)			
1995	6.34	6.34	5.62
1996	6.12	6.12	5.27
1997	6.15	6.16	5.27

1. Includes federal agency obligations.
2. Does not include indebtedness assumed by the Federal Deposit Insurance Corporation.
3. Based on holdings at opening of business.

lion, and holdings of loans increased $71 million.

The average rate of interest earned on Reserve Banks' holdings of government securities rose to 6.16 percent, from 6.12 percent in 1996. The average rate of interest earned on loans remained constant at 5.27 percent.

Volume of Operations

Table 9 in the "Statistical Tables" chapter shows the volume of operations in the principal departments of the Federal Reserve Banks for the years 1994 through 1997.

Federal Reserve Bank Premises

During 1997, construction was completed on the new headquarters building for the Minneapolis Reserve Bank; relocation of staff and operations was completed in October. The expansion and renovation of the headquarters building of the Cleveland Reserve Bank continued during the year, as did design work for the Atlanta Reserve Bank's new headquarters building and its new Birmingham Branch building.

Multiyear renovation programs continued for the New York Reserve Bank's headquarters building and the Oklahoma City, Seattle, Portland, and Salt Lake City Branches. The Board approved the New York Reserve Bank's request to lease space in a nearby office building in New York City and to make necessary leasehold improvements to the facility.

The Chicago Reserve Bank relocated its Des Moines, Iowa, office to leased space in a new building near the airport. The Atlanta Reserve Bank sold its headquarters building, and the Minneapolis Reserve Bank sold its former headquarters building before relocating to its new building. ■

Pro Forma Financial Statements for Federal Reserve Priced Services

Pro Forma Balance Sheet for Priced Services, December 31, 1997 and 1996

Millions of dollars

Item	1997		1996[1]	
Short-term assets (Note 1)				
Imputed reserve requirements on clearing balances	658.0		658.3	
Investment in marketable securities	5,922.0		5,924.7	
Receivables	72.8		69.0	
Materials and supplies	2.8		3.0	
Prepaid expenses	9.0		23.0	
Items in process of collection	3,742.3		7,548.4	
Total short-term assets		10,406.8		14,226.4
Long-term assets (Note 2)				
Premises	389.2		394.6	
Furniture and equipment	137.4		148.4	
Leases and leasehold improvements	31.8		29.5	
Prepaid pension costs	350.2		287.4	
Total long-term assets		908.5		859.9
Total assets		**11,315.3**		**15,086.3**
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	7,114.8		12,366.3	
Deferred-availability items	3,207.5		1,765.1	
Short-term debt	84.5		95.0	
Total short-term liabilities		10,406.8		14,226.4
Long-term liabilities				
Obligations under capital leases	.7		2.3	
Long-term debt	188.8		189.3	
Postretirement/postemployment benefits obligation	205.0		191.8	
Total long-term liabilities		394.5		383.4
Total liabilities		**10,801.3**		**14,609.8**
Equity		514.0		476.5
Total liabilities and equity (Note 3)		**11,315.3**		**15,086.3**

NOTE. Components may not sum to totals because of rounding.

The priced services financial statements consist of these tables and the accompanying notes.

1. Some of these data have been revised.

Pro Forma Income Statement for Federal Reserve Priced Services, 1997 and 1996

Millions of dollars

Item	1997		1996	
Revenue from services provided to depository institutions (Note 4)		789.1		787.2
Operating expenses (Note 5)		672.6		666.0
Income from operations		116.4		121.2
Imputed costs (Note 6)				
Interest on float	14.6		21.9	
Interest on debt	17.5		17.3	
Sales taxes	9.8		11.6	
FDIC insurance	6.9	48.9	0.0	50.8
Income from operations after imputed costs		67.6		70.4
Other income and expenses (Note 7)				
Investment income	367.7		315.8	
Earnings credits	–338.0	29.7	–287.1	28.7
Income before income taxes		97.3		99.1
Imputed income taxes (Note 8)		31.2		29.6
Net income (Note 9)		**66.1**		**69.5**
MEMO: Targeted return on equity (Note 10)		54.3		42.9

NOTE. Components may not sum to totals because of rounding.

The priced services financial statements consist of these tables and the accompanying notes.

Pro Forma Income Statement for Federal Reserve Priced Services, by Service, 1997

Millions of dollars

Item	Total	Commercial check collection	Funds transfer and net settlement	Book-entry securities	Commercial ACH	Noncash collection	Cash services
Revenue from operations	789.1	598.4	94.6	16.6	70.3	4.3	4.9
Operating expenses (Note 5)	672.6	540.3	76.1	14.8	49.3	2.9	4.3
Income from operations	116.4	58.1	18.6	1.8	21.0	1.4	.6
Imputed costs (Note 6)	48.9	40.9	3.8	.7	3.0	.3	.2
Income from operations after imputed costs	67.6	17.1	14.8	1.1	18.0	1.1	.4
Other income and expenses, net (Note 7)	29.7	23.2	3.2	.6	2.4	.2	.2
Income before income taxes	97.3	40.4	18.0	1.7	20.4	1.3	.6

NOTE. Components may not sum to totals because of rounding.

The priced services financial statements consist of these tables and the accompanying notes.

FEDERAL RESERVE BANKS

Notes to Financial Statements for Priced Services

(1) Short-Term Assets

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as non-earning balances maintained at a Reserve Bank; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. The remainder of clearing balances is assumed to be invested in three-month Treasury bills, shown as investment in marketable securities.

Receivables are (1) amounts due the Reserve Banks for priced services and (2) the share of suspense-account and difference-account balances related to priced services.

Materials and supplies are the inventory value of short-term assets.

Prepaid expenses include salary advances and travel advances for priced-service personnel.

Items in process of collection is gross Federal Reserve cash items in process of collection (CIPC) stated on a basis comparable to that of a commercial bank. It reflects adjustments for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; adjustments for items associated with non-priced items, such as those collected for government agencies; and adjustments for items associated with providing fixed availability or credit before items are received and processed. Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred-availability items, which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate.

(2) Long-Term Assets

Consists of long-term assets used solely in priced services, the priced-services portion of long-term assets shared with nonpriced services, and an estimate of the assets of the Board of Governors used in the development of priced services. Effective Jan. 1, 1987, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). Accordingly, the Reserve Banks recognized credits to expenses of $62.8 million in 1997 and $45.3 million in 1996 and corresponding increases in this asset account.

(3) Liabilities and Equity

Under the matched-book capital structure for assets that are not "self-financing," short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the fifty largest bank holding companies, which are used in the model for the private-sector adjustment factor (PSAF). The PSAF consists of the taxes that would have been paid and the return on capital that would have been provided had priced services been furnished by a private-sector firm. Other short-term liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of accrued postemployment and postretirement benefits costs and obligations on capital leases.

(4) Revenue

Revenue represents charges to depository institutions for priced services and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits.

(5) Operating Expenses

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses for staff members of the Board of Governors working directly on the development of priced services. The expenses for Board staff members were $2.9 million in 1997 and $2.8 million in 1996. The credit to expenses under SFAS 87 (see note 2) is reflected in operating expenses.

The income statement by service reflects revenue, operating expenses, and imputed costs except for income taxes. Total operating expense does not equal the sum of operating expenses for each service because of the effect of SFAS 87. Although the portion of the SFAS 87 credit related to the current year is allocated to individual services, the amortization of the initial effect of implementation is reflected only at the System level.

(6) Imputed Costs

Imputed costs consist of interest on float, interest on debt, sales taxes, and the FDIC assessment. Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for checks, book-entry securities, noncash collection, ACH, and funds transfers.

Interest is imputed on the debt assumed necessary to finance priced-service assets. The sales taxes and FDIC assessment that the Federal Reserve would have paid had it been a private-sector firm are among the components of the PSAF (see note 3).

Float costs are based on the actual float incurred for each priced service. Other imputed costs are allocated among priced services according to the ratio of operating expenses less shipping expenses for each service to the total expenses for all services less the total shipping expenses for all services.

The following list shows the daily average recovery of float by the Reserve Banks for 1997 in millions of dollars:

Total float	545.5
Unrecovered float	16.7
Float subject to recovery	528.8
Sources of recovery of float	
Income on clearing balances	52.9
As-of adjustments	263.5
Direct charges	103.9
Per-item fees	108.5

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float recovered through income on clearing balances is the result of the increase in investable clearing balances; the increase is produced by a deduction for float for cash items in process of collection, which reduces imputed reserve requirements. The income on clearing balances reduces the float to be recovered through other means. As-of adjustments and direct charges are midweek closing float and interterritory check float, which may be recovered from depositing institutions through adjustments to the institution's reserve or clearing balance or by valuing the float at the federal funds rate and billing the institution directly. Float recovered through per-item fees is valued at the federal funds rate and has been added to the cost base subject to recovery in 1997.

(7) Other Income and Expenses

Consists of investment income on clearing balances and the cost of earnings credits. Investment income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits granted to depository institutions on their clearing balances are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

Because clearing balances relate directly to the Federal Reserve's offering of priced services, the income and cost associated with these balances are allocated to each service based on each service's ratio of income to total income.

(8) Income Taxes

Imputed income taxes are calculated at the effective tax rate derived from the PSAF model (see note 3). Taxes have not been allocated by service because they relate to the organization as a whole.

(9) Adjustments to Net Income for Price Setting

In setting fees, certain costs are excluded in accordance with the System's overage and shortfalls policy and its automation consolidation policy. Accordingly, to compare the financial results reported in this table with the projections used to set prices, adjust net income as follows (amounts shown are net of tax):

	1997	1996
Net income	66.1	69.5
Amortization of the initial effect of implementing SFAS 87	–10.2	–10.5
Deferred costs of automation consolidation	–8.5	–6.3
Adjusted net income	47.4	52.7

(10) Return on Equity

The after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, as derived from the PSAF model (see note 3). This amount is adjusted to reflect the recovery of $8.5 million of automation consolidation costs for 1997 and $6.3 million for 1996. The Reserve Banks plan to recover these amounts, along with a finance charge, by the end of the year 2001. After-tax return on equity has not been allocated by service because it relates to the organization as a whole.